

Fig. 1

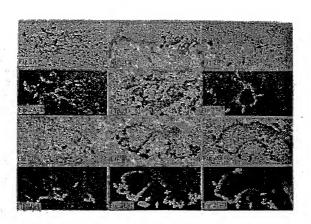


Fig. 2

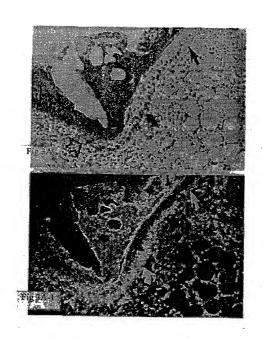


Fig. 3

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FIG 4A (SEQ ID NO.:12 & 13)
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 61 aggegeeggg cagegaeece tgeageggag acagagaetg ageggeeegg caeegeeatg
121 cetgogetet ggetgggetg etgectetge ttetegetee teetgecege agecegggee 2 P A L W L G C C L C F S L L L P A A R A
181 acetecagga gggaagtetg tgattgcaat gggaagteca ggcagtgtat ctttgatcgg
                             DCN
                                        G K S . R Q C I
                         ‡⇒ Domain V
 241 gaacttcaca gacaaactgg taatggattc cgctgcctca actgcaatga caacactgat
42 E L H R Q T G N G F R C L N C N D N T D
 301 ggcattcact gcgagaagtg caagaatggc ttttaccggc acagagaaag ggaccgctgt 62 G I H C E K C K N G F Y R H R E R D R C
 361 ttgccctgca attgtaactc caaaggttct cttagtgctc gatgtgacaa ctctggacgg
  82 L P. C. N.C. N.S. K.G.S. L.S.A. R.C.D.N. S.G.R.
 421 tgcagetgta aaccaggtgt gacaggagcc agatgcgacc gatgtctgcc aggettccac
 102 C S C K P G V T G A R C D R C L P
 481 atgeteacgg atgeggggtg cacceaagae cagagaetge tagaetecaa gtgtgaetgt
 122 M L T D A G C T O D O R L L D S K C D C
 541 gaeccagetg gcategcagg gceetgtgae gegggeeget gtgtetgeaa gecagetgtt
142 D P A G I A G P C D A G R C V C K P A V
 601 actggagaac gctgtgatag gtgtcgatca ggttactata atctggatgg ggggaaccct
162 T G E R C D R C R S G Y Y N L D G G N P
 162 T G E R C
 661 gagggetgta eccagtgttt etgetatggg catteageca getgeegeag etetgeagaa
                TQCF
                              CYGHSASCRSS
                                                         t⇒ Domain IV
 721 tacagtgtcc ataagateac etctacettt catcaagatg ttgatggctg gaaggetgtc
            V H K I T S T F H Q D
 781 caacgaaatg ggtctcctgc aaagctccaa tggtcacagc gccatcaaga tgtgtttagc
 222 QRNGSPAKLQWSQRHQD
 841 tragerraac gartagater tytetattit gtggctcctg craaattict tgggaatraa
 242 SAQRLDPVYFVAPAKFL
                                                                  G N O
 901 caggtgagct atgggcaaag cetgteettt gactacegtg tggacagagg aggcagacae
262 O V S Y G O S L S F D Y R V D R G G R H
961 coatetgece atgatgtgat cetggaaggt getggtetae ggateacage tecettgatg
282 P S A H D V I L E G A G L R I T A P L M
1021 ccacttggca agacactgcc ttgtgggctc accaagactt acacattcag gttaaatgag
302 PLG KTLP CGL TKT Y TFR
1081 catecaagea ataattggag eccecagetg agttactttg agtategaag gttactgegg 322 H P S N N W S P Q L S Y F E Y R R L L R
1141 aatotoacag coetoogoat cogagotaca tatggagaat acagtactgg gtacattgac
342 N L T A L R I R A T Y G E Y S T G Y I D
1201 aatgtgaece tgattteage eegecetgte tetggageee cageacette ggttgaacag
362 N V T L I S A R P V S G A P A P W V E Q
1261 tgtatatgtc ctgttgggta caaggggcaa ttctgccagg attgtgcttc tggctacaag
382 C I C P
                       GY KGQ FCQ DCAS
1321 agagattcag cgagactggg gccttttggc acctgtattc cttgtaactg tcaaggggga
402 R D S A R L G P F G T C I P C N C Q G G
1381 ggggeetgtg atccagacae aggagattgt tattcagggg atgagaatce tgacattgag
      GAC DPDT GDC YSG DENP
                                                                  DIE
422
1441 tytyctgact gcccaattgg tttctacaac gatccgcacg acccccgcag ctgcaagcca442 C A D C P I G F Y N D P H D P R S C K P
1501 tgtccctgtc ataacgggtt cagctgctca gtgattccgg agacggagga ggtggtgtgc
                HNGF
                             s c s
                                          V T P
                                                    E T E E
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FIG 4B (SEO ID NO.:12 & 13) 1561 aataactgoc cteccggggt caccggtgoc egetgtgage tetgtgotga tggetaettt
482 N N C P P G V T G A R C E L C A D G Y F 1621 ggggacccct ttggtgaaca tggcccagtg aggccttgtc agccctgtca atgcaacagc 502 DPFGEH G P V RPC QPCQ CNS 1681 aatgtggacc ccagtgcctc tgggaattgt gaccggctga Caggcaggtg tttgaagtgt DRLTGRC V D P S A S G N C 1741 atccacaaca cagcoggcat ctactgcgac cagtgcaaag caggctactt cggggaccca 542 I H N T A G I Y C D Q C K A G Y F G D P 1801 ttggctccca acccagcaga caagtgtcga gcttgcaact gtaaccccat gggctcagag 562 LAPNPADKCRACNCNPM 1861 cctgtaggat gtcgaagtga tggcacctgt gtttgcaagc caggatttgg tggccccaac 582 P V G C R S D G T C VCKPGFG 1921 tgtgagcatg gagcattcag ctgtccagct tgctataatc aagtgaagat tcagatggat 602 CEHGAFS CPACYNOVKI ס א ס := Domain I/II 1981 cagtttatgc agcagcttca gagaatggag gccctgattt caaaggctca gggtggtgat 622 Q F M Q Q L Q R M E A L I S K A Q G G D 2041 ggagtagtac ctgatacaga gctggaaggc aggatgcagc aggctgagca ggcccttcag G V V P D T E LEGRMO O A E Q 2101 gacattetga gagatgeeca gattteagaa ggtgetagea gatecettgg tetecagttg
662 D I L R D A Q I S E G A S R S L G L Q L 2161 gccaaggtga ggagccaaga gaacagctac cagagccgcc tggatgacct caagatgact 682 RSQENSY QSR L D D L 2221 gtggaaagag ttegggetet gggaagteag taccagaace gagtteggga tactcacagg 702 V E R V R A L G S Q Y Q N R V R D T H R 2281 ctcatcactc agatgcaget gagectggca gaaagtgaag etteettggg aaacactaac 722 L I T QMQL SLA ESE ASLG 2341 attectgeet cagaccacta egtggggeea aatggettta aaagtetgge teaggaggee 742 I PA SDHY V G P N G F K S L A O E A 2401 acaagattag cagaaagcca cgttgagtca gccagtaaca tggagcaact gacaagggaa 762 T R L A E S H V E S A S N M E Q L T R E 2461 actgaggact attccaaaca agccctctca ctggtgcgca aggccctgca tgaaggagtc 782 TEDYSKQ ALS LVR KALHEG 2521 ggaagcggaa gcggtagccc ggacggtgct gtggtgcaag ggcttgtgga aaaattggag G S G S G S P DGA V V Q G L V E K L E 2581 aaaaccaagt ccctggccca gcagttgaca agggaggcca ctcaagcgga aattgaagca 822 K T K S L A Q QLT REATQAE IEA 2641 gataggtett atcagcacag tetecgette etggatteag tgteteeget teagggagte 842 DRS YQHS LRL LDS VSPLQ 2701 agtgatcagt cctttcaggt ggaagaagca aagaggatca aacaaaaagc ggattcactc 862 S D Q S F Q V E E A K R I K Q K A DSL 2761 tcaagcctgg taaccaggca tatggatgag ttcaagcgta cacaaaagaa tctgggaaac V T R H M D E 882 S S L F K R T Q K N 2821 tggaaagaag aagcacagca gotottacag aatggaaaaa gtgggagaga gaaatcagat 902 W K E EAQQ LLQNGKSG 2881 cagctgcttt cccgtgccaa tcttgctaaa agcagagcac aagaagcact gagtatgggc 922 Q L L S R A N L A K S R A Q E A L S M 2941 aatgccactt tttatgaagt tgagagcatc cttaaaaacc tcagagagtt tgacctgcag 942 NATFYEV ESI LKN LREF 3001 gtggacaaca gaaaagcaga agctgaagaa gccatgaaga gactctccta catcagccag 962 V D N R K A E A E E A M K R L S Y I S Q 3061 aaggtttcag atgccagtga caagacccag caagcagaaa gagccctggg gagcgctgct 982 K V S D A S D K T Q Q A E R A L G S A A 3121 gctgatgcac agagggcaaa gaatggggcc ggggaggccc tggaaatctc cagtgagatt

1002 ADAORAKNGA GEALEIS SEI

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FIG 4C
                               (SEQ ID NO.: 12 & 13)
 3181 gaacaggaga ttgggagtct gaacttggaa gccaatgtga cagcagatgg agccttggcc
1022 E Q E I G S L
                                         N L E A N V T A D G A L A
3241 atggaaaagg gactggcctc tctgaagagt gagatgaggg aagtggaagg agagctggaa
1042 M E K G L A S L K S E M R E V E G E L E
3301 aggaaggage tggagtttga cacgaatatg gatgcagtac agatggtgat tacagaagcc 1062 R K E L E F D T N M D A V Q M V I T E A
3361 cagaaggttg ataccagagc caagaacgct ggggttacaa tccaagacac actcaacaca
                      DTRAKNA
                                                             V T I Q D T L N T
1082
         о к
3421 tragacggcc tectgeater garggaccag ceteteagrg ragargaaga ggggerggte
1102 L D G L L H L M D Q P L S V D E E G L
3481 ttactggage agaagettte cegagecaag acceagatea acagecaact geggeecatg
1122 L L E Q K L S R A K T Q I N S Q L R P M
3541 atgtcagage tggaagagag ggcacgtcag cagaggggcc acctccattt gctggagaca
1142 M S E L E E R
                                         ARQ QRG H L H L L E T
3601 agcatagatg ggattotggo tgatgtgaag aacttggaga acattaggga caacotgoco
1162 S I D G I L A D V K N L E N I R D N L P
3661 ccaggotgot acaataccca ggotottgag caacagtgaa gotgocataa atatttotca
1182 PGCYNTQALE QQ
3721 actgaggttc ttgggataca gatctcaggg ctcgggagcc atgtcatgtg agtgggtggg
3781 atggggacat ttgaacatgt ttaatgggta tgctcaggtc aactgacctg accccattcc
3841 tgatcccatg gccaggtggt tgtcttattg caccatacte cttgcttcct gatgctgggc
3901 atgaggcaga taggcactgg tgtgagaatg atcaaggate tggaccccaa agatagactg
3961 gatggaaaga caaactgcac aggcagatgt ttgcctcata atagtcgtaa gtggagtcct
4021 ggaatttgga caagtgctgt tgggatatag tcaacttatt ctttgagtaa tgtgactaaa
4081 ggaaaaact ttgactttgc ccaggcatga aattcttcct aatgtcagaa cagagtgcaa
1904 ggsammaar Ligacttige conggiring maturities and plangar languiges
1411 congitance citylgocong tamantanta tigottonia tigicottigi Gangettotti
4201 getgantanga gitoctocia citanamore aggetgana engiptotto attituango
1826 tigganamang aggetatigit gyagiganga cotytiango aggetante angocatio
4201 tograngang sagrangstyt gyagusang begunning mayechan baselunt al

4321 tograngtogs generitaga gattogastt tygaectogg estgacate titetittam

4381 tograngs generitaga gattogast titatianag attoctac apcamagna

4431 atgutgggan appartiant titetegitt camagnyan gamagnyan gettyggan

4501 togangaggi amaaitotet agaittaita giectamit amicologic titogangan

4501 amamagnaggi amaaitotet agaittaita giectamit amicologic tittecicie
4621 acccataata agagaatgtt cotactoaca ottoagotgg gtoacatoca tocotocatt
4681 catoottoca tocatotto catocattac otocatocat cottocaaca tatatttatt
4741 gagtacctac tgtgtgccag gggctggtgg gacagtggtg acatagtete tgccctcata
1901 gagttgattg totagtgagg angacagus tetttaamam atamattam acttacamam
1861 tttgttgtc acaagtggtg tttattgcam tamacogcttg gittgcamac tetttgctam
1821 acaganacama tgttgcamag acctoccamig ggaactaggt ttggcamagagagtg
4981 ctgggttgtg cacatttett tgcattecag cgtcactetg tgccttetac aactgattge
5041 aacagactgt tgagttatga taacaccagt gggaattgct ggaggaacca gaggcacttc
5101 caccttggct gggaagacta tggtgctgcc ttgcttctgt atttccttgg attttcctqa
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5161 aagtgttttt aaataaagaa caattgttag atgccaaaaa //

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FIG 4D

(SEQ ID NO.:14 & 15)

3421 ttagacagec tectgeatet gatgagtatg tgaaceaca acceacaace ttecagetee
1102 L D G L L H L M G M

3481 atgetecagg getttgetee agaacactea etatacetag ecceageaa ggggagtete
3541 agettteett aaggatatea gtaaatgtge ttygtteca ggeccagata actteeggea
3661 ggttecetta eattacetga eccetgitti accyttgeta agatgggtee etagacacet
3661 attgeacttg ggggtaaagg tettgggga etegtget aggategge atgaacacet
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3721 gaacaggas eagettggga atectgetaa aggatetgge etygacetg agagecagt
3781 ggacagttt aagcagaga ataacatea cactgatata tteagaaag teataggag
3841 agcegagtga ggaaagett gaagagggg ttagagagag ggatgagaag
3961 gtageteggaa gaagatet gaagagggg tagagagag ggatgagaag
3961 gtageteggag agatgaag gaagtte eagetetgga agatgaagaa cactgee
4021 gecgggtegg gtggetaag gcggagtta agattee cactgetgt gagtacagaa tactgeeg
4021 gecggagtgg gtggetaag gaagatte cacagattg ggagactga geggggggt
4031 tetgagaag gaagattga agacaget ggecaaatg ggaacacag geggggggt
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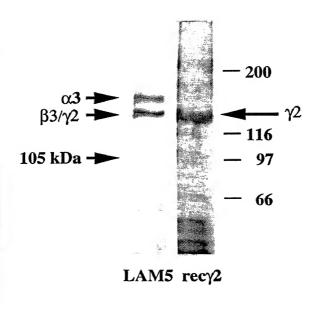


Fig. 5

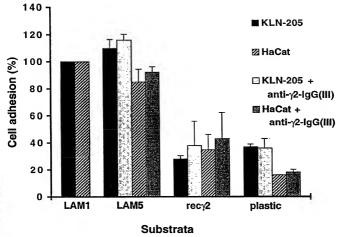


Fig. 6

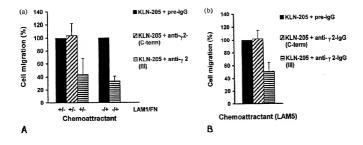


Fig 7

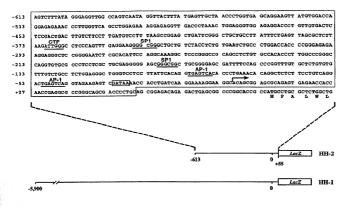


Fig. 8

Fig. 9

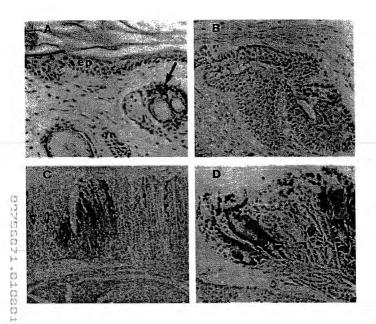


Fig. 10

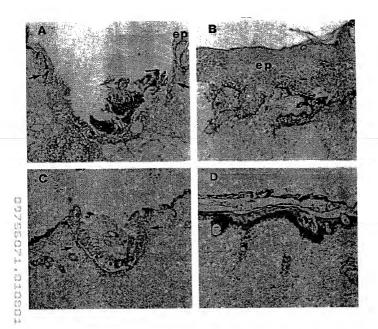


Fig. 11